

APPENDIX E

DOT CHART 10

HAZARDOUS MATERIALS MARKING, LABELING & PLACARDING GUIDE

This appendix contains facsimiles of hazardous materials warning labels, placards, and package markings and guidelines for their use as set forth in DOT Chart 10. Full-color copies of DOT Chart 10 can be obtained by calling 1-800-467-4922, extension 3, or writing OHMIT/DHM-51, Washington, DC 20590. Regulations and requirements governing the transport of hazardous materials by all modes of transportation can be found in 49 CFR, Parts 100-199. For detailed information and to determine compliance, refer to that and other applicable publications.

GENERAL GUIDELINES ON THE USE OF WARNING LABELS AND PLACARDS

LABELS

See Figure E-1, page E-2, for hazardous materials warning labels. The following guidelines apply to the use of warning labels:

- On and after 1 October 1993, those labels in boxes marked "TRANSITION-2001" will not be authorized for use under 49 CFR, Part 172, Subpart E. (NOTE: These labels may be used IF they were affixed to a package offered for transportation and transported prior to 1 October 2001, and the package was filled with hazardous materials prior to 1 October 1991.)

- For classes 1, 2, 3, 4, 5, 6 and 8, text indicating a hazard (e.g., "CORROSIVE") IS NOT required on a label. The label must otherwise conform to Subpart E (Section 172.405).

- Any person who offers a hazardous material for transportation MUST label the package, if required [Section 172.400(a)].

- The Hazardous Materials Table (Section 172.101) identifies the proper label(s) for the hazardous material listed.

- When required, labels must be printed on or affixed to the surface of the package near the proper shipping name [Section 172.406(a)].

- When two or more labels are required, they must be displayed next to each other [Section 172.406(c)].

- Labels may be affixed to packages when not required by regulations, provided each label represents a hazard of the material contained in the package (Section 172.401).

See 49 CFR, Part 172, Subpart E for complete labeling regulations.





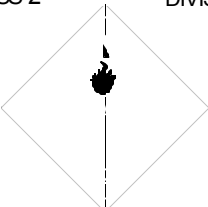
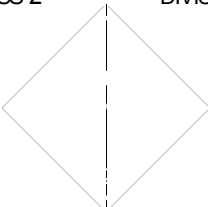
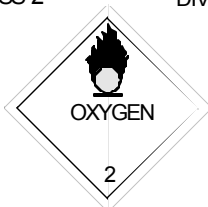
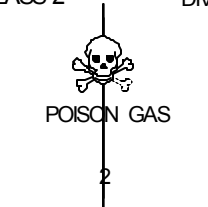
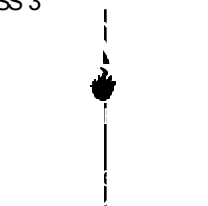
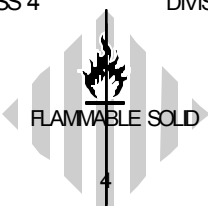

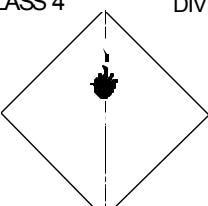

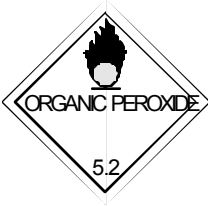


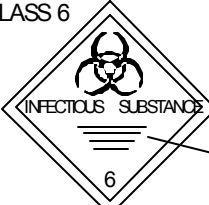

<p>CLASS 1 EXPLOSIVE 1.1 1.2 1.3</p>  <p>*INCLUDE APPROPRIATE DIVISION NUMBER AND COMPATIBILITY GROUP LETTER.</p>	<p>CLASS 1 EXPLOSIVE 1.4</p>  <p>*INCLUDE APPROPRIATE COMPATIBILITY GROUP LETTER.</p>	<p>CLASS 1 EXPLOSIVE 1.5</p>  <p>*INCLUDE APPROPRIATE COMPATIBILITY GROUP LETTER.</p>	<p>CLASS 1 EXPLOSIVE 1.6</p>  <p>*INCLUDE APPROPRIATE COMPATIBILITY GROUP LETTER.</p>
<p>CLASS 2 DIVISION 2.1</p>  <p>FLAMMABLE GAS</p>	<p>CLASS 2 DIVISION 2.2</p>  <p>NONFLAMMABLE GAS</p>	<p>CLASS 2 DIVISION 2.2</p>  <p>OXYGEN</p>	<p>CLASS 2 DIVISION 2.3</p>  <p>POISON GAS</p>
<p>CLASS 3</p>  <p>FLAMMABLE LIQUID</p>	<p>CLASS 4 DIVISION 4.1</p>  <p>FLAMMABLE SOLID</p>	<p>CLASS 4 DIVISION 4.2</p>  <p>SPONTANEOUSLY COMBUSTIBLE</p>	<p>CLASS 4 DIVISION 4.3</p>  <p>DANGEROUS WHEN WET</p>
<p>CLASS 5 DIVISION 5.1</p>  <p>OXIDIZER</p>	<p>CLASS 5 DIVISION 5.2</p>  <p>ORGANIC PEROXIDE</p>	<p>CLASS 6 DIVISION 6.1</p>  <p>POISON-PACKING GROUP I AND II</p>	<p>CLASS 6 DIVISION 6.1</p>  <p>POISON-PACKING GROUP III</p> <p>STOW AWAY FROM FOODSTUFFS</p>
<p>CLASS 6 DIVISION 6.2</p>  <p>IN CASE OF DAMAGE OR LEAKAGE IMMEDIATELY NOTIFY PUBLIC HEALTH AUTHORITY</p> <p>INFECTIOUS SUBSTANCE</p>	<p>ETIOLOGIC AGENTS</p> <p>BIOMEDICAL MATERIAL</p> <p>IN CASE OF DAMAGE OR LEAKAGE NOTIFY DIRECTOR CDC ATLANTA, GEORGIA 404 633 5313</p> <p>42 CFR 723 ETIOLOGICAL AGENT LABEL MAY APPLY.</p>		
			<p>CLASS 7 I</p>  <p>CONTENTS... ACTIVITY.....</p>

Figure E-1. Hazardous materials warning labels

<div>CLASS 7</div> <div>II</div> <div></div>	<div>CLASS 7</div> <div>III</div> <div></div>	<div>CLASS 8</div> <div></div> <div>CORROSIVE</div>	<div>CLASS 9</div> <div></div>
<div>SUBSIDIARY RISK LABELS</div> <div></div> <div>EXPLOSIVE FLAMMABLE GAS FLAMMABLE LIQUID FLAMMABLE SOLID CORROSIVE OXIDIZER POISON SPONTANEOUSLY COMBUSTIBLE DANGEROUS WHEN WET</div> <div>THE CLASS NUMBER MAY NOT BE DISPLAYED ON A SUBSIDIARY LABEL (SEE SECTION 172402)</div>			<div></div>
<div>FOR AIRCRAFT</div> <div>CARGO AIRCRAFT ONLY</div> <div></div> <div>DO NOT LOAD IN PASSENGER AIRCRAFT</div> <div>KEEP AWAY FROM AIRCRAFT COMPASS DETECTOR UNIT</div> <div></div>			
<div>TRANSITION-2001</div> <div></div>	<div>TRANSITION-2001</div> <div></div>	<div>TRANSITION-2001</div> <div></div>	<div>TRANSITION-2001</div> <div></div>
<div>TRANSITION-2001</div> <div></div>	<div>TRANSITION-2001</div> <div></div>	<div>TRANSITION-2001</div> <div></div>	

Figure E -1. Hazardous materials warning labels (continued)

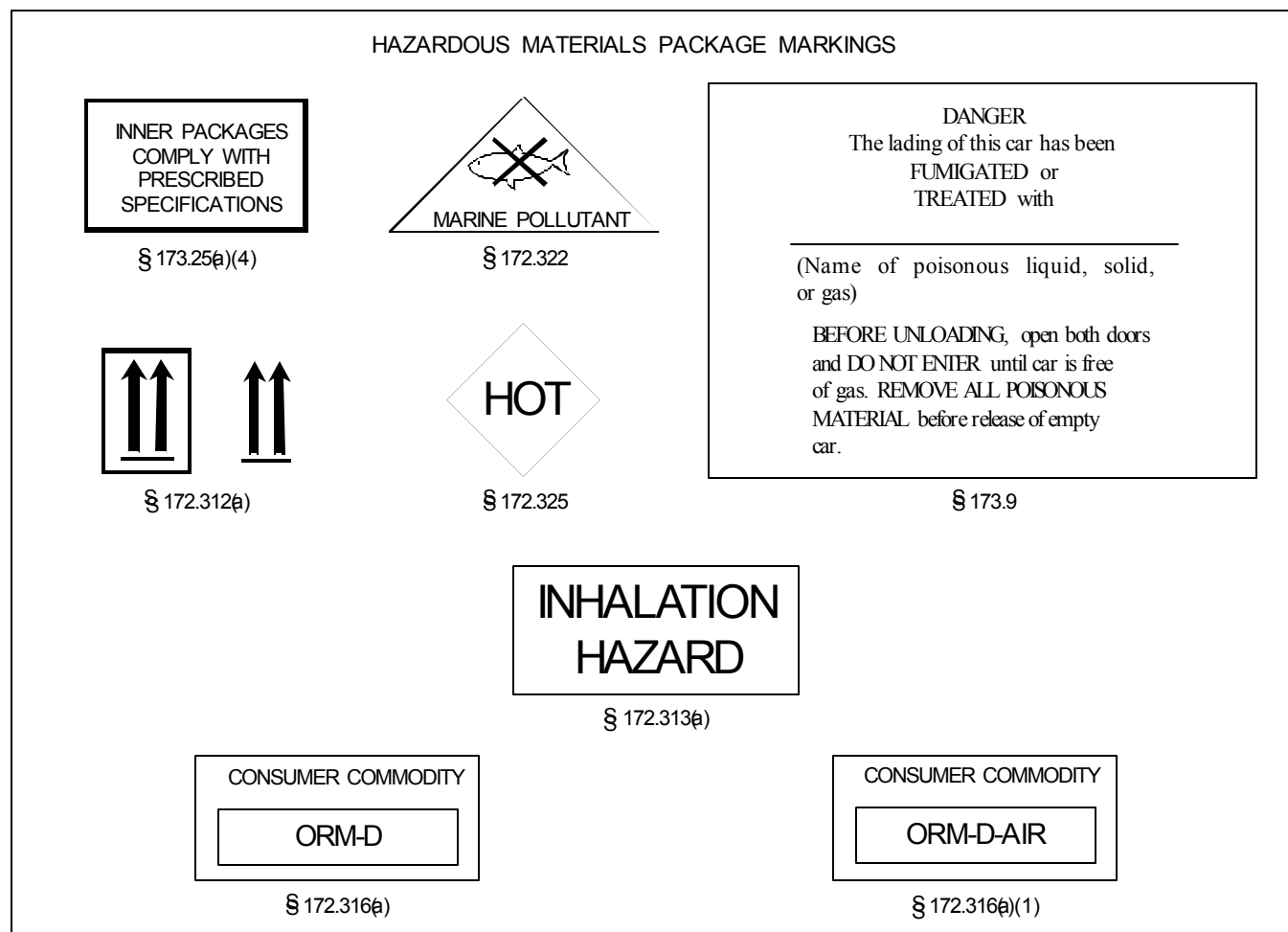


Figure E-1. Hazardous materials warning labels (continued)

PLACARDS

See Figure E-2, page E-5, for hazardous materials warning placards and Tables E-1 and E-2, page E-8, for a list of hazard classes and placard names. The following guidelines apply to the use of placards:

- All of the placards shown in this appendix may be used to satisfy the placarding requirements contained in 49 CFR, Part 172, Subpart F.
- Each person who offers for transportation or transports any hazardous material subject to the Hazardous Materials Regulations shall comply with all applicable requirements of Subpart F.
- Placards may be displayed for a hazardous material even when not required, if the placarding otherwise conforms to the requirements of Subpart F.

- For other than Class 7 or the OXYGEN placard, text indicating a hazard (e.g., “CORROSIVE”) is not required on a placard [Section 172.519(b)].

- Any transport vehicle, freight container, or rail car containing any quantity of material listed in Table E-1 (Section 172.504) must be placarded.

- When the gross weight of all hazardous materials covered in Table E-2 is less than 454 kg (1,001 lbs), no placard is required on a transport vehicle or freight container [Section 172.504]. Refer to 49 CFR, Part 172, Subpart F for complete placarding regulations.











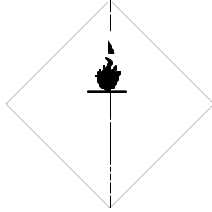

<p>CLASS 1</p>  <p>EXPLOSIVES *ENTER DIVISION NUMBER 1.1, 1.2, OR 1.3 AND COMPATIBILITY GROUP LETTER, WHEN REQUIRED. PLACARD ANY QUANTITY.</p>	<p>CLASS 1</p>  <p>EXPLOSIVES 1.4 *ENTER COMPATIBILITY GROUP LETTER, WHEN REQUIRED. PLACARD 454 KG (1,001 LBS) OR MORE.</p>	<p>CLASS 1</p>  <p>EXPLOSIVES 1.5 *ENTER COMPATIBILITY GROUP LETTER, WHEN REQUIRED. PLACARD 454 KG (1,001 LBS) OR MORE.</p>	<p>CLASS 1</p>  <p>EXPLOSIVES 1.6 *ENTER COMPATIBILITY GROUP LETTER, WHEN REQUIRED. PLACARD 454 KG (1,001 LBS) OR MORE.</p>
<p>CLASS 2</p>  <p>OXYGEN PLACARD 454 KG (1,001 LBS) OR MORE, GROSS WEIGHT OF EITHER COMPRESSED GAS OR REFRIGERATED LIQUID.</p>	<p>CLASS 2</p>  <p>FLAMMABLE GAS PLACARD 454 KG (1,001 LBS) OR MORE.</p>	<p>CLASS 2</p>  <p>NON-FLAMMABLE GAS PLACARD 454 KG (1,001 LBS) OR MORE GROSS WEIGHT.</p>	<p>CLASS 2</p>  <p>POISON GAS PLACARD ANY QUANTITY OF DIVISION 2.3 MATERIAL.</p>
<p>CLASS 3</p>  <p>FLAMMABLE PLACARD 454 KG (1,001 LBS) OR MORE.</p>	<p>CLASS 3</p>  <p>GASOLINE MAY BE USED IN THE PLACE OF FLAMMABLE ON A PLACARD DISPLAYED ON A CARGO TANK OR A PORTABLE TANK BEING USED TO TRANSPORT GASOLINE BY HIGHWAY.</p>	<p>CLASS 3</p>  <p>COMBUSTIBLE PLACARD A COMBUSTIBLE LIQUID WHEN TRANSPORTED IN BULK. SEE § 172.504(f)(2) FOR USE OFFLAMMABLE PLACARD IN PLACE OF COMBUSTIBLE PLACARD.</p>	<p>CLASS 3</p>  <p>FUEL OIL MAY BE USED IN PLACE OF COMBUSTIBLE ON A PLACARD DISPLAYED ON A CARGO TANK OR PORTABLE TANK BEING USED TO TRANSPORT BY HIGHWAY FUEL OIL NOT CLASSED AS A FLAMMABLE LIQUID.</p>

Figure E-2. Hazardous materials warning placards



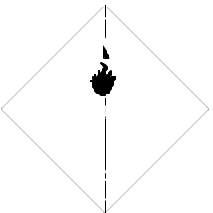


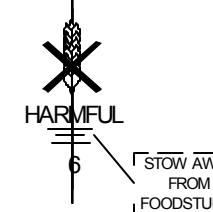



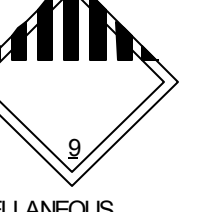

<p>CLASS 4</p>  <p>FLAMMABLE SOLID PLACARD 454 KG (1,001 LBS) OR MORE.</p>	<p>CLASS 4</p>  <p>SPONTANEOUSLY COMBUSTIBLE PLACARD 454 KG (1,001 LBS) OR MORE.</p>	<p>CLASS 4</p>  <p>DANGEROUS WHEN WET PLACARD ANY QUANTITY OF DIVISION 4.3 MATERIAL.</p>	<p>CLASS 5</p>  <p>OXIDIZER PLACARD 454 KG (1,001 LBS) OR MORE.</p>
<p>CLASS 5</p>  <p>ORGANIC PEROXIDE PLACARD 454 KG (1,001 LBS) OR MORE.</p>	<p>CLASS 6</p>  <p>KEEP AWAY FROM FOOD PLACARD 454 KG (1,001 LBS) OR MORE.</p>	<p>CLASS 6</p>  <p>POISON PLACARD ANY QUANTITY OF 6.1, PGI, INHALATION HAZ- ARD ONLY. PLACARD 454 KG (1,001 LBS) OR MORE OF PGI OR II, OTHER THAN PGI INHA- LATION HAZARD.</p>	<p>CLASS 7</p>  <p>RADIOACTIVE PLACARD ANY QUANTITY OF PACKAGES BEARING THE RADIO- ACTIVE III LABEL. CERTAIN LOW SPECIFIC ACTIVITY RADIO- ACTIVE MATERIALS IN "EXCLU- SIVE USE" WILL NOT BEAR THE LABEL, BUT RADIOACTIVE PLACARD IS REQUIRED.</p>
<p>CLASS 8</p>  <p>CORROSIVE PLACARD 454 KG (1,001 LBS) OR MORE.</p>	<p>CLASS 9</p>  <p>MISCELLANEOUS NOT REQUIRED FOR DOMES- TIC TRANSPORTATION. PLACARD 454 KG (1,001 LBS) OR MORE GROSS WEIGHT OF A MATERIAL WHICH PRESENTS A HAZARD DURING TRANSPORT, BUT IS NOT INCLUDED IN ANY OTHER HAZARD CLASS.</p>	 <p>DANGEROUS PLACARD 454 KG (1,001 LBS) GROSS WEIGHT OF TWO OR MORE CATEGO- RIES OF HAZARDOUS MATERIALS LISTED IN TABLE 2. A FREIGHT CONTAINER, UNIT LOAD DEVICE, MOTOR VEHICLE, OR RAIL CAR WHICH CONTAIN NON-BULK PACKAGINGS WITH TWO OR MORE CATEGORIES OF HAZARDOUS MATERIALS THAT REQUIRE PLACARDS SPECIFIED IN TABLE 2 MAY BE PLACARDED WITH DANGEROUS PLACARD INSTEAD OF THE SEPARATE PLACARDING SPECIFIED FOR EACH OF THE MATERIALS IN TABLE 2. HOWEVER, WHEN 2,268 KG (5,000 LBS) OR MORE OF ONE CATEGORY OF MATERIAL IS LOADED AT ONE FACILITY, THE PLACARD SPECIFIED IN TABLE 2 MUST BE APPLIED.</p>	

Figure E-2. Hazardous materials warning placards (continued)

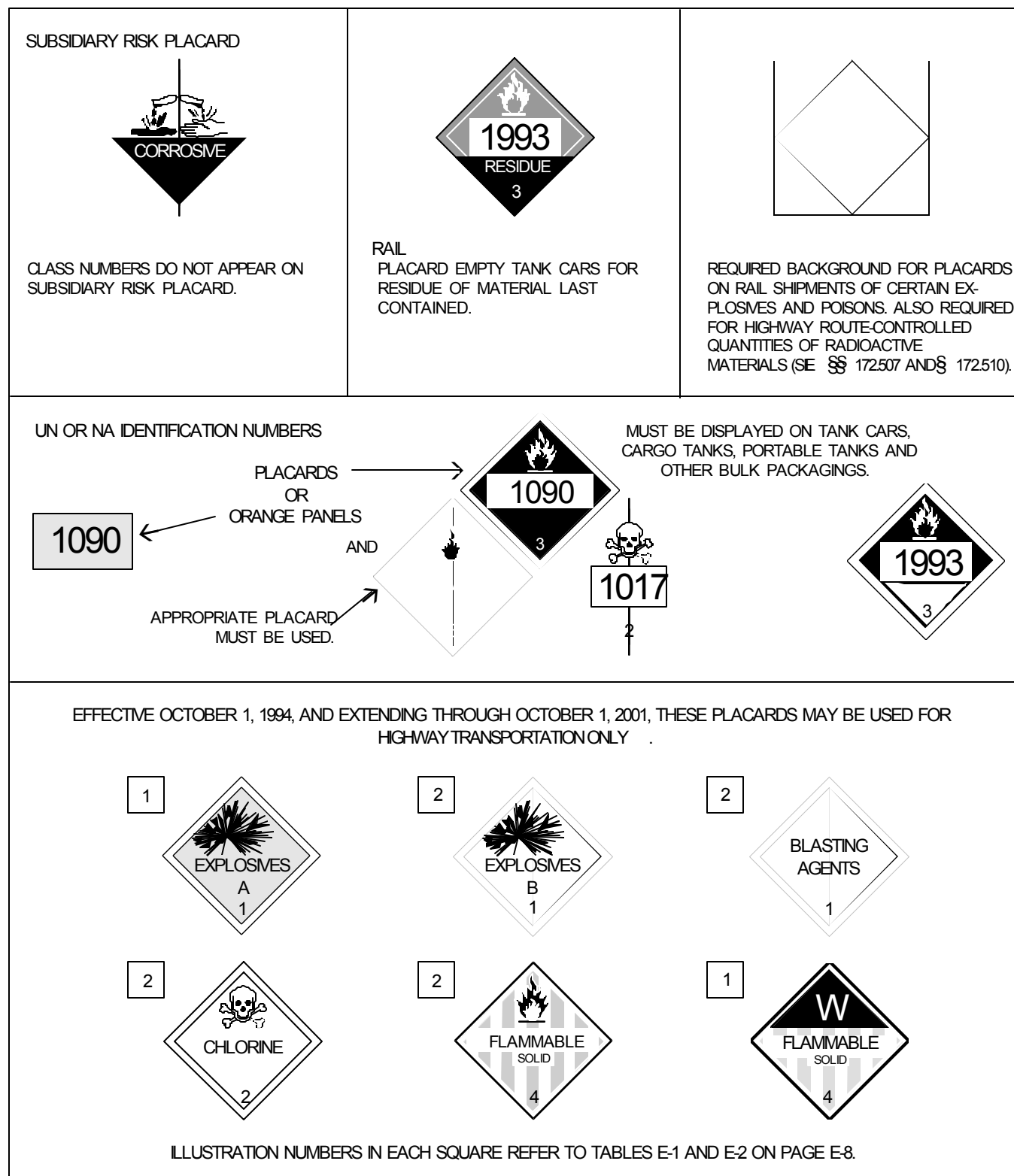


Figure E-2. Hazardous materials warning placards (continued)

Table E-1. Placard (any quantity)

HAZARD CLASS OR DIVISION	PLACARD NAME
1.1	EXPLOSIVES 1.1
1.2	EXPLOSIVES 1.2
1.3	EXPLOSIVES 1.3
2.3	POISON GAS
4.3	DANGEROUS WHEN WET
6.1 (PGI, PIH only)	POISON
7 (Radioactive Yellow III)	RADIOACTIVE

Table E-2. Placard (1,001 pounds or more)

HAZARD CLASS OR DIVISION	PLACARD NAME
1.4	EXPLOSIVES 1.4
1.5	EXPLOSIVES 1.5
1.6	EXPLOSIVES 1.6
2.1	FLAMMABLE GAS
2.2	NON-FLAMMABLE GAS
3	FLAMMABLE
Combustible Liquid	COMBUSTIBLE
4.1	FLAMMABLE SOLID
4.2	SPONTANEOUSLY COMBUSTIBLE
5.1	OXIDIZER
5.2	ORGANIC PEROXIDE
6.1 (PGI or II, other than PGI PIH)	POISON
6.1 (PGIII)	KEEP AWAY FROM FOOD
6.2	NONE
8	CORROSIVE
9	CLASS 9
ORM-D	NONE

POISONOUS MATERIALS

Materials which meet the inhalation toxicity criteria have additional “communication standards” prescribed by the HMR. First, the words “Poison-Inhalation Hazard” must be entered on the shipping paper, as required by 49 CFR, Section 172.203(m)(3). Second, packagings must be marked “Inhalation Hazard” in accordance with Section 172.313(a). Lastly, transport vehicles, freight

containers, portable tanks and unit load devices that contain a poisonous material subject to the “Poison-Inhalation Hazard” shipping description, must be placarded with a POISON or POISON GAS placard, as appropriate. This shall be in addition to any other placard required for that material in Section 172.504. See Figure E-3 for illustrations.



Figure E-3. Poisonous materials markings and placards